The notion of entrenchment: A psycholinguistic experiment on L1 and L2 processing of morphologically complex words

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The research aims at investigating the degree of entrenchment of morphologically complex words in L1 and L2 users' competence and its effect on word processing. In usage-based models, an element is conceived as mentally entrenched when it is perceived as a unit which has cognitive precedence over its components (see Blumenthal-Dramé 2012, but also Bybee 2010 and Tomasello 2003). As far as morphologically complex words are concerned, entrenchment is determined by the strength of the lexical representation of the complex words (as a whole) and of its morphological constituents. Lexical strength, in its turn, mainly depends on token frequency.

So far, psycholinguistic research has demonstrated that the probability for a morphologically complex word to be accessed by whole-word processing, or by the processing of its morphological components, is determined by the balance between the frequency of the complex word (as a whole) and the frequency of the morphemes present in the stimulus. (Beauvillain 1996, Burani/ Caramazza 1987, Colé/ Beauvillain/ Segui 1989, Schreuder/ Burani/ Baayen 2002).

For Italian, Burani/ Thornton (2003) investigated the interplay between the frequency of the root, the frequency of the suffix and the whole-word frequency in processing derived words. More precisely, they considered low frequency suffixed words which differed with respect to the frequency of their morphemic constituents.

In the present study we will verify whether the different degree of entrenchment is determinant also in the processing of L2 morphologically complex words. This is particularly interesting, as some authors argue for the existence of substantial differences between native and non-native processing of morphologically complex words (Silva/Clahsen 2008), while others (Dal Maso/Giraudo in press) found morphological priming effects also in L2 processing, at least for words having a high surface frequency and very productive suffixes. In order to further investigate the role of morphology in the L2 processing and more specifically to verify the whole-part meronimic relationship, in this research we will look at the ratio between the whole-word frequency and the frequency of the base word and we will carry out a psycholinguistic experiment on processing.

The poster will describe: a) the research hypothesis, b) the research methodology (i.e. the masked-prime paradigm associated with a lexical decision task, Forster / Davis 1984), c) the choice of L1 and L2 subjects for our experiment, d) the critical materials designed for the research, e) our predictions about experimental results.

More particularly, about the materials, we will focus on: i) the choice of suffixes according to their numerosity and frequency (and productivity/numerosity ratio); ii) the choice of the suffixed words in relation to the relation between the frequency of the whole word and the frequency of the base (suffixed/base ratio), as in the following table:

Derived word	**frequency**	**range**	**Base word**	**frequency**	**range**	**Derived/base ratio**
GIOCOSO	13	12383	GIOCO	938	297	**72,15385**
SETTORIALE	7	18333	SETTORE	493	695	**70,4285714**
PRESTIGIOSO	104	2873	PRESTIGIO	75	3481	**0,721154**
PEDONALE	20	9742	PEDONE	11	13653	**0,55**

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